

Amendment to the Claims:

Claims 1-21 (Canceled)

22. (Currently amended) A transgenic mouse whose genome comprises a null neuronal tyrosine/threonine phosphatase 1 (NTTP1) allele; ~~said null allele comprising exogenous DNA.~~

23. (Previously presented) The transgenic mouse of claim 33, wherein the anti-depressive behavior is characterized by a decrease in time spent immobile while tail suspended, relative to a wild-type control mouse.

24. (Previously presented) A cell or tissue isolated from the transgenic mouse of claim 22.

Claims 25-26 (Canceled)

27. (Previously presented) A method of producing the transgenic mouse of claim 22, the method comprising:

- (a) introducing a targeting construct capable of disrupting an endogenous NTTP1 allele into a mouse embryonic stem cell;
- (b) selecting for the embryonic stem cell which has undergone homologous recombination;
- (c) introducing the embryonic stem cell selected for in step (b) into a mouse blastocyst;
- (d) implanting the resulting blastocyst into a pseudopregnant mouse, wherein the resultant mouse generates chimeric mice; and
- (e) breeding the chimeric mice to produce the transgenic mouse.

Claims 28-31 (Canceled)

32. (Previously presented) The transgenic mouse of claim 22, wherein the mouse is homozygous for said null allele.

33. (Previously presented) The transgenic mouse of claim 32, wherein the mouse exhibits, relative to wild-type control mouse, anti-depressive behavior.

34. (Currently amended) The transgenic mouse of claim 22 wherein said null allele comprises exogenous DNA. ~~said exogenous DNA comprising~~ comprises a gene encoding a selection marker.

35. (Previously presented) The transgenic mouse of claim 34 wherein said gene is a neomycin resistant gene.

36. (Currently amended) The transgenic mouse of claim ~~33~~22 wherein said ~~exogenous DNA~~ null allele comprises a gene encoding lacZ ~~a visible marker~~.

37. (Canceled)

38. (Previously presented) The transgenic mouse of claim 22 wherein said null allele comprises exogenous DNA said exogenous DNA located between nucleotides 142 and 305 of SEQ ID NO: 1.

39. (Withdrawn) A method of identifying an agent capable of modulating activity of a NTTP1 gene or NTTP1 gene expression product, the method comprising:

- a. administering a putative agent to the transgenic mouse of claim 22;
- b. administering the agent to a wild-type control mouse; and
- c. comparing a physiological response of the transgenic mouse with that of the control mouse;

wherein a difference in the physiological response between the transgenic mouse and the control mouse is an indication that the agent is capable of modulating activity of the gene or gene expression product.